IT Basics Assignment -2

1. What is Client-Server architecture?

Client-Server Architecture is a computing model in which the server hosts, delivers and manages most of the resources and services obtained by the client.

1. What is 2,3 and n-tier architecture?

The 2 tier architecture is based on client-server machine. In this type of architecture, the applications on client side directly interact with database server.

In 3 tier architecture there is an intermediate level called middleware system.

This middleware system divided in to two parts

a) web server for presentation purpose for the client.

b) application server for whose task is to provide the requested resources, but validating the resource is available/correct in the main server and perform all backend tasks.

N-tier architectures is that they make load balancing possible. Since it is distributed all load in to different servers and also easy scalable but also it experiences the high demand and also increased complexity.

1. What are Static and Dynamic web pages?

A Static web page is a stable content where every user sees the exact same thing of the individual page.

A Dynamic web page displays the different content for different users while retaining the same layout of the application.

1. What is DBMS and Explain each one of its type with an example?

A DBMS is a software that allows creation, definition and manipulation of database, allowing users to store, process and analyses the data easily.

The types of DBMS are

a) Hierarchical Databases: -

In Hierarchical Database model, data is organized in to a tree-like structure. The data is stored in the form of a collection of fields where each field contains only one value. The records are linked to each other via links in to parent-child relation ship and each child have only one parent but parent have multiple child’s.

b) Network Databases: -

Network Databases are mainly used on large digital entities. A network node can have a relationship with multiple entities and a network database looks like a interconnected network of records. Data in a network database is organized in many-to-many relationships.

1. Relational Databases: -

In Relational Databases the relationship between data is relational and data is stored in tabular form of columns and rows. Each column of a table represents an attribute and each row in a table represents a record. Each field in a table represents a data value.

1. What is RDBMS? What is SQL?

The software used to store and manage a query and relative data stored in the relational database is called RDBMS. The RDBMS also provides a interface between users and applications and the database as well as administrative functions for managing data storage, access and performance.

SQL is a standardized programming language that is used to manage relational databases and perform the various operations on the data which is stored in databases.

1. What is a server?

A Server is a computer or system that provides resources, data, services or programs to other computer, which are requested by the client over a network.

1. What are forms and reports?

Forms and Reports are used to interact with relational database where forms are used to get the data from users and reports are used to present the result to the user request.

1. What is a program?

A program is set of rules and performs the particular task assigned by the user.

1. What is a web server and application server?

A web server accepts and fulfill the requests from clients for static content from a website. Web servers handle http requests and response only.

An application server exposes the logic to the client and generates the dynamic content of the client requests.

1. What is middleware?

Middleware is software that bridges the gap between other applications, tools and databases in order to provide unified services to users.